

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute
305 South Street, Jamaica Plain, MA 02130

DEVAL L. PATRICK
GOVERNOR

TIMOTHY P. MURRAY
LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD
SECRETARY

JOHN AUERBACH
COMMISSIONER

06/28/2011

Edward Curley
Assistant District Attorney, Suffolk County

Dear ADA Curley,

Enclosed is the information you requested in regards to Commonwealth vs. [REDACTED] Included are copies of the following:

1. Curriculum Vitae for Annie Dookhan, and Peter Piro
2. Drug Analysis Laboratory Receipt.
3. Control Cards with analytical results for samples # [REDACTED]
4. Analysis sheets with custodial chemist's hand notations and test results.
5. GC/Mass Spectral analytical data for samples # [REDACTED]

Annie Dookhan was the custodial chemist and performed the preliminary testing and net weight for this sample. Peter Piro was the confirmatory chemist and analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely,

A handwritten signature in cursive script, appearing to read "Annie Dookhan".

Annie Dookhan
Chemist II
Drug Analysis Lab
Jamaica Plain, MA. 02130
(617) 983-6631

Curriculum Vitae

Annie Khan (Dookhan)

Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry.

University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

Experience:

2003 – present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- *Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- *Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.
- *Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.
- *Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- *Maintenance and repairs of all analytical instruments.
- *Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.
- *Responsible for the Quality Control/Quality Assurance program for the drug lab.
- *Notary Public.
- *Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 – 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- *Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.
- *Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.
- *Writing, revising and reviewing Standard Operating Procedures (SOPs).
- *Trained and supervised new chemists and interns for the department.
- *Routine QC testing of products for the FDA.
- *Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- *Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- *Complete testing of chemicals for Vendor Validation Project for the FDA.
- *Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

Additional Training:

Dept. of Justice – Forensics Professionals. (numerous trainings)
GLP/GMP course with Massachusetts Biologic Laboratory.
QC/QA training according to FDA Codes and Regulations.
GC and GC/MS courses with Agilent Technologies and Restek.
HPLC course with Waters Cooperation.
FTIR course with Spectros.
TOC training with MBL and Sievers.

Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

Curriculum Vitae

Peter Piro

EDUCATION

Boston University

B.A. in Chemistry and Minor in Biology, 1989

HONORS

Magna Cum Laude, 3.6 GPA

Graduated with Distinction in Chemistry

Valedictorian of the Chemistry Department

EXPERIENCE

Department of Public Health/State Laboratory Institute

Chemist III, II, I/ Assistant Analyst

December 1991-Present

Supervise the operation and maintenance of the Gas Chromatography/Mass Spectrometry Laboratory. Analyze controlled substances for State and Federal law enforcement agencies. Qualified as an expert witness in Massachusetts courts and U.S. District Court.

Massachusetts Health Research Institute

Laboratory Technician

September 1990-December 1991

Researched the seasonal and special occurrences of DSP and PSP in shellfish samples harvested from coastal waters and Georges Bank.

TRAINING AND ORGANIZATIONS

- * Completed a six-week training course by senior staff within the Department of Public Health Drug Analysis laboratory.
- * Appointed Assistant Analyst by the Assistant Commissioner of Public Health in February 1991.
- * Elected as a Regular Member to the Northeastern Association of Forensic Chemists on October 27th 1995.
- * Completed training in Mass Spectrometry given by the Food and Drug Administration/Forensic Chemistry Center on November 2002.
- * Completed training in Mass Spectrometry Troubleshooting and Maintenance, October 25th 2002, at Agilent Technologies.
- * Notary Public since 1993.

DRUG RECEIPT

CC #

BOOK #

PAGE #

DESTRUCTION #

District/Unit

Name & Rank of Arresting Officer

ID#

DEFENDANT'S NAME

ADDRESS

CITY

STATE

Mattapan

MA.

DESCRIPTION OF ITEMS SUBMITTED

GROSS
QUANTITYGROSS
WEIGHT

LAB USE ONLY

ANALYSIS
NUMBER

CRACK COCAINE

12 P/B'S

9.76g

CRACK COCAINE

3 P/B'S

5.27g

MARIJUANA

2 P/B'S

15.34g

To be completed by ECU personnel only

Name and Rank of Submitting Officer

ID#

Received by

Date

ECU Control #

No. [REDACTED] Date Analyzed: 4-18-11
City: Boston D.C.U. Police Dept.
Officer: P.O. Diana Lopez
Def: [REDACTED]
Amount: Subst: SUB
No. Cont: 12 Cont: pb
Date Rec'd: 03/29/2011 No. Analyzed: 3
Gross Wt.: 9.76 Net Weight: 6.18
Tests: 18 ASD
• 6 P.P.A.
Prelim: cocaine (C) Findings: Cocaine

No. [REDACTED] Date Analyzed: 4-18-11
City: Boston D.C.U. Police Dept.
Officer: P.O. Diana Lopez
Def: [REDACTED]
Amount: Subst: SUB
No. Cont: 3 Cont: pb
Date Rec'd: 03/29/2011 No. Analyzed: 1
Gross Wt.: 5.27 Net Weight: 0.09
Tests: 6 ASD
• 2 P.P.A.
Prelim: cocaine (C) Findings: Cocaine

DRUG POWDER ANALYSIS FORM

SAMPLE # AGENCY Boston ANALYST AS?

No. of samples tested: Evidence Wt.

PHYSICAL DESCRIPTION:

off white chunky substance
1A 12 pbs

1 pb = large
11 pb = small.

Gross Wt (12): 7.1845

Gross Wt ():

Pkg. Wt:

Net Wt:

large = gross wt 1 pb = 3.2182
net wt = 3.0495

small = gross wt 11 pbs = 3.9661
gross wt 2 pbs = 0.6852

PRELIMINARY TESTS

Spot Tests

3 Cobalt
Thiocyanate (-) +
3 Marquis -
3 Froehde's -
3 Mecke's -

Microcrystalline Tests

3 Gold
Chloride +
3 TLTA (-) +

OTHER TESTS

PRELIMINARY TEST RESULTS

RESULTS COCAINE

DATE 4-12-11

GC/MS CONFIRMATORY TEST

RESULTS COCAINE

MS
OPERATOR PJP

DATE 4-18-11

Sample #: [REDACTED]

samples tested: 2

#	Gross Weight	Packet Weight	Net Weight	#	Gross Weight	Packet Weight	Net Weight
1	0.3326		0.2721	26			
2	0.3541		0.2973	27			
3				28			
4		$\chi =$	0.5694	29			
5		$\bar{x} =$	0.2847	30			
6		$(\bar{x})11 =$	3.1317	31			
7				32			
8				33			
9				34			
10				35			
11				36			
12				37			
13				38			
14	#			39			
15				40			
16				41			
17				42			
18				43			
19				44			
20				45			
21				46			
22				47			
23				48			
24				49			
25				50			

Calculations:

$$Est\ Net\ wt = 3.1317 + 3.0495$$

$$= 6.1812$$

DRUG POWDER ANALYSIS FORM

SAMPLE # [REDACTED] AGENCY Boston ANALYST ASJ

No. of samples tested: Evidence Wt.

PHYSICAL DESCRIPTION:

off white chunky substance
173 pbs

Gross Wt (3): 0.4127

Gross Wt (1): 0.1588

Pkg. Wt:

Net Wt: 0.0999

PRELIMINARY TESTS

Spot Tests

Cobalt
Thiocyanate (+) +

Marquis -

Froehde's -

Mecke's -

Microcrystalline Tests

Gold
Chloride +

TLTA (+) +

OTHER TESTS

PRELIMINARY TEST RESULTS

RESULTS cocaine

DATE 4-12-11

GC/MS CONFIRMATORY TEST

RESULTS cocaine

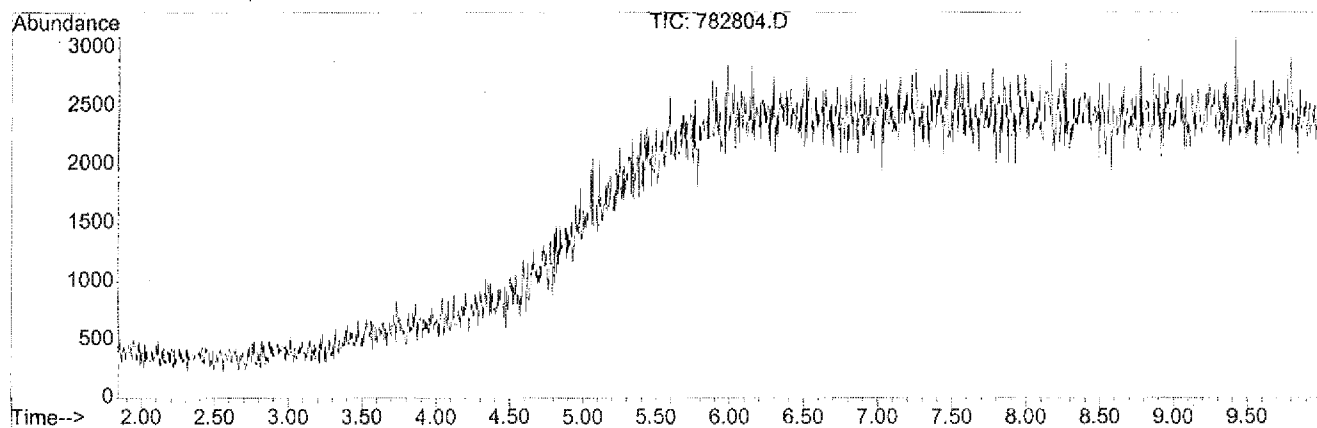
MS
OPERATOR PJP

DATE 4-18-11

Area Percent / Library Search Report

Information from Data File:

File Name : F:\SYSTEM7\04_15_11\782804.D
Operator : ASD
Date Acquired : 15 Apr 2011 9:12
Sample Name : BLANK
Submitted by :
Vial Number : 1
AcquisitionMeth: DRUGS
Integrator : RTE



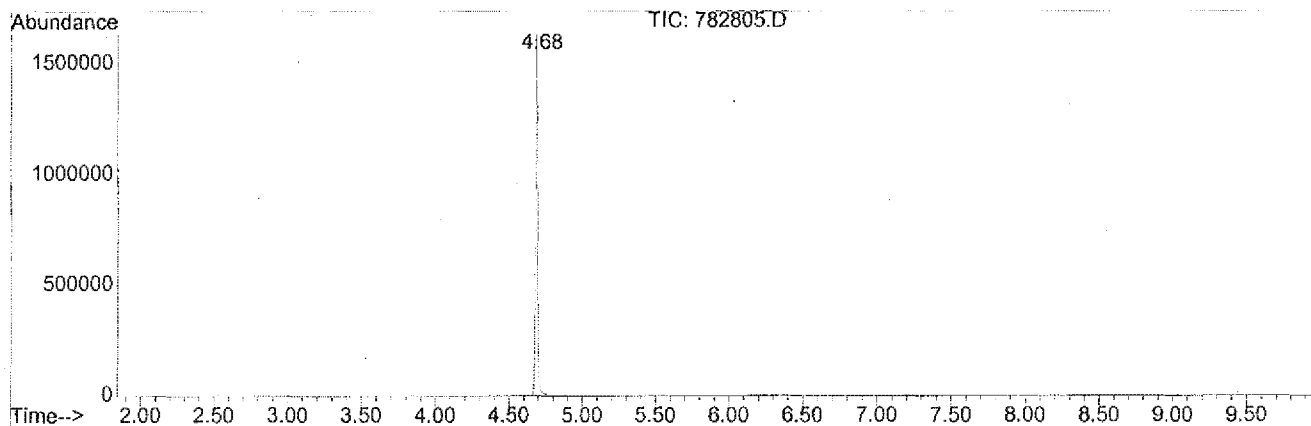
Ret. Time	Area	Area %	Ratio %
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NO INTEGRATED PEAKS

Area Percent / Library Search Report

Information from Data File:

File Name : F:\SYSTEM7\04_15_11\782805.D
 Operator : ASD
 Date Acquired : 15 Apr 2011 9:25
 Sample Name : COCAINE STD
 Submitted by :
 Vial Number : 5
 AcquisitionMeth: DRUGS
 Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.681	1644176	100.00	100.00

Area Percent / Library Search Report

Information from Data File:

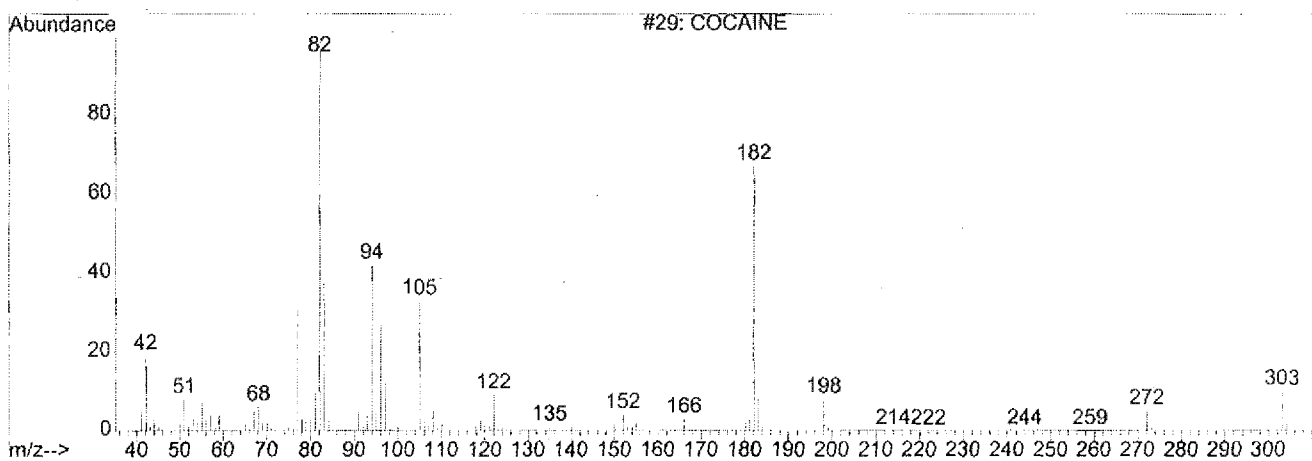
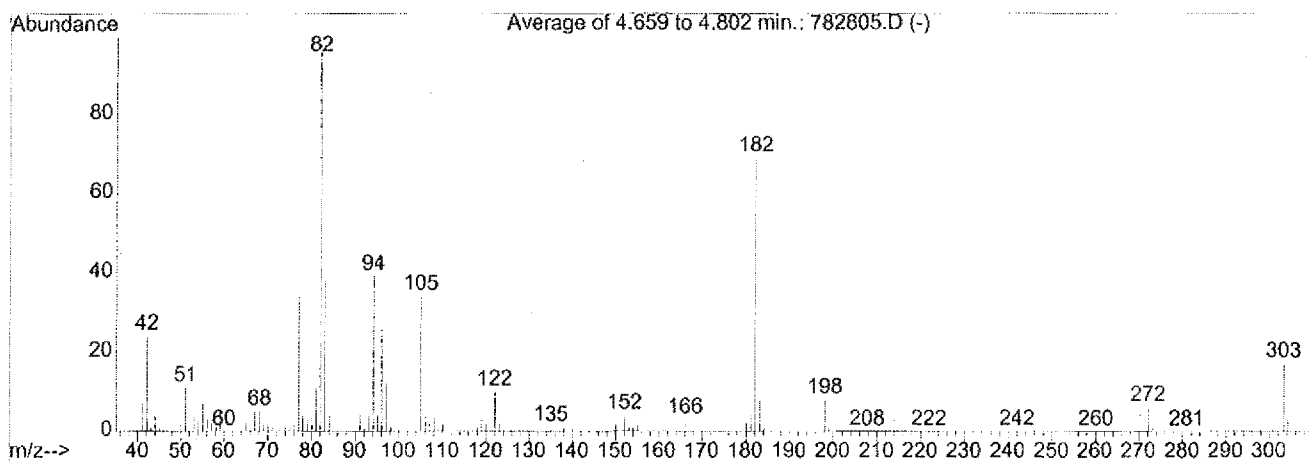
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File Name       : F:\SYSTEM7\04_15_11\782805.D
Operator        : ASD
Date Acquired   : 15 Apr 2011   9:25
Sample Name     : COCAINE STD
Submitted by    :
Vial Number     : 5
AcquisitionMeth : DRUGS
Integrator      : RTE
  
```

```

Search Libraries: C:\DATABASE\SLI.L           Minimum Quality: 90
                  C:\DATABASE\PMW_TOX2.L      Minimum Quality: 90
                  C:\DATABASE\NIST98.L
  
```

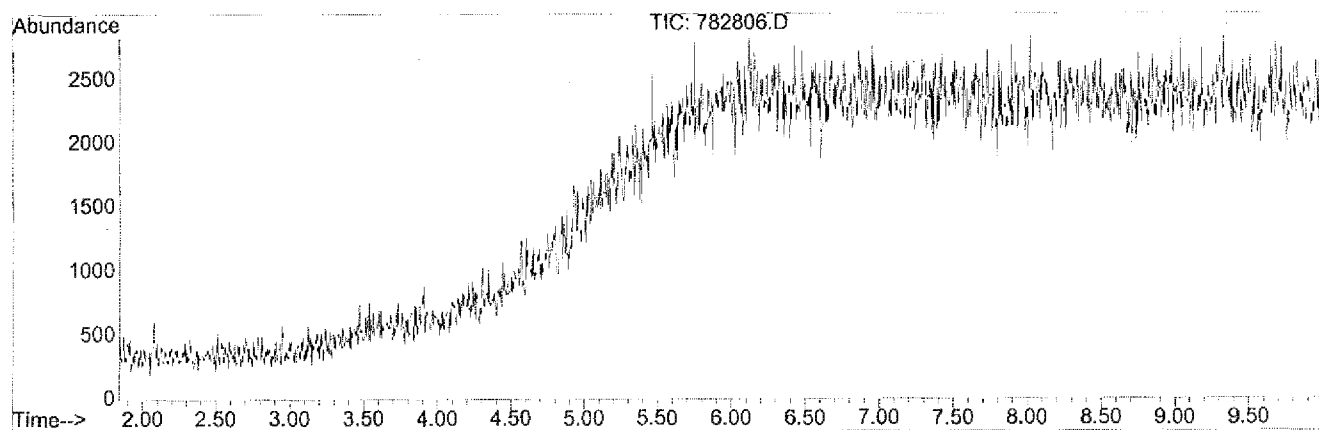
PK#	RT	Library/ID	CAS#	Qual
1	4.68	C:\DATABASE\SLI.L COCAINE	000050-36-2	99



Area Percent / Library Search Report

Information from Data File:

File Name : F:\SYSTEM7\04_15_11\782806.D
Operator : ASD
Date Acquired : 15 Apr 2011 9:37
Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS
Integrator : RTE



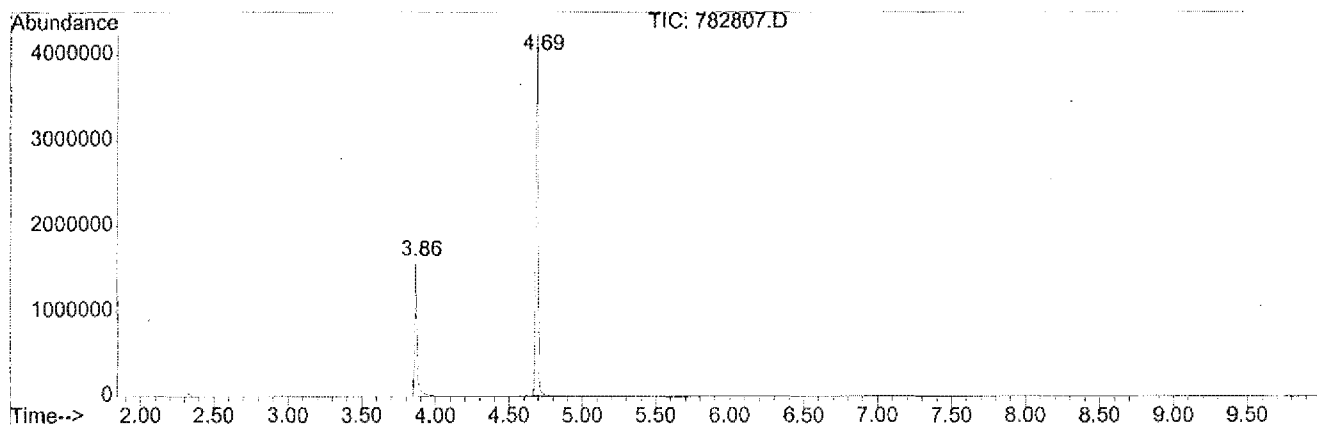
Ret. Time	Area	Area %	Ratio %
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NO INTEGRATED PEAKS

Area Percent / Library Search Report

Information from Data File:

File Name : F:\SYSTEM7\04_15_11\782807.D
 Operator : ASD
 Date Acquired : 15 Apr 2011 9:50
 Sample Name : XXXXXXXXXX
 Submitted by : ASD
 Vial Number : 7
 AcquisitionMeth: DRUGS
 Integrator : RTE



Ret. Time	Area	Area %	Ratio %
3.865	1855850	27.84	38.58
4.691	4810297	72.16	100.00

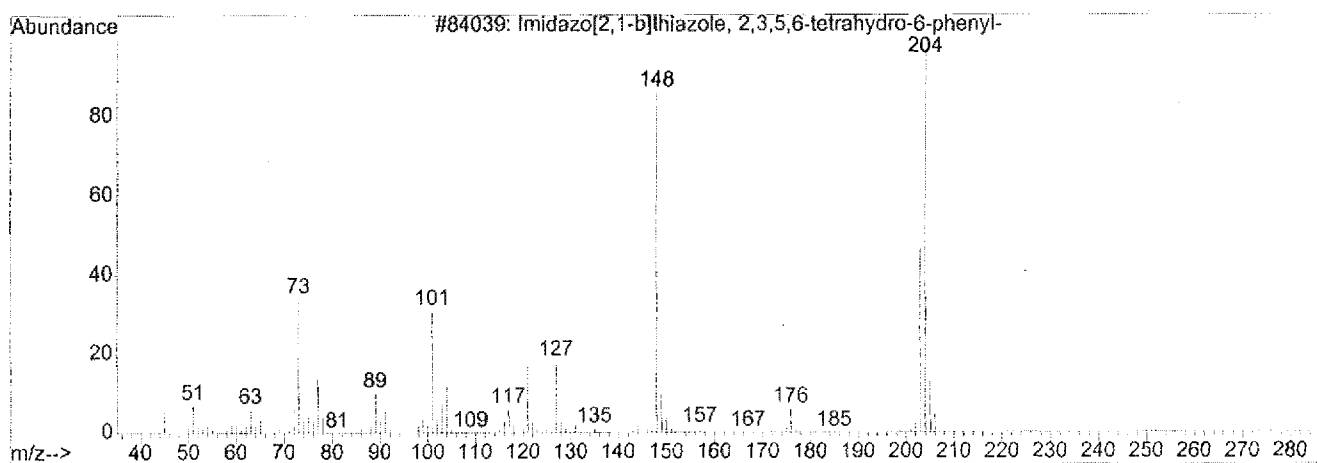
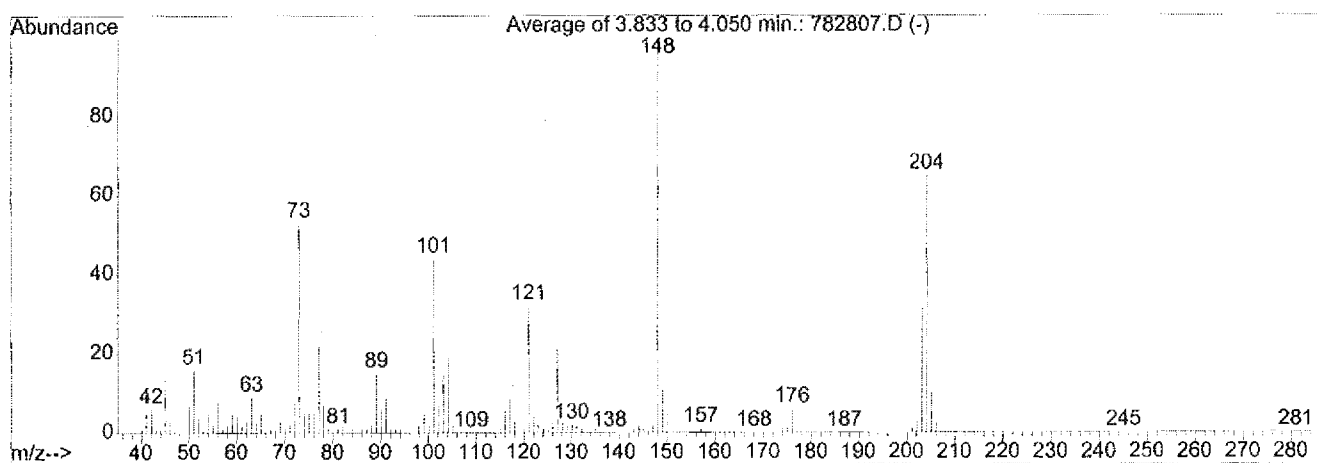
Area Percent / Library Search Report

Information from Data File:

File Name : F:\SYSTEM7\04_15_11\782807.D
 Operator : ASD
 Date Acquired : 15 Apr 2011 9:50
 Sample Name : XXXXXXXXXX
 Submitted by : ASD
 Vial Number : 7
 AcquisitionMeth: DRUGS
 Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90
 C:\DATABASE\PMW_TOX2.L Minimum Quality: 90
 C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
1	3.86	C:\DATABASE\NIST98.L		
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	98
		Levamisole Hydrochloride	016595-80-5	98
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	98



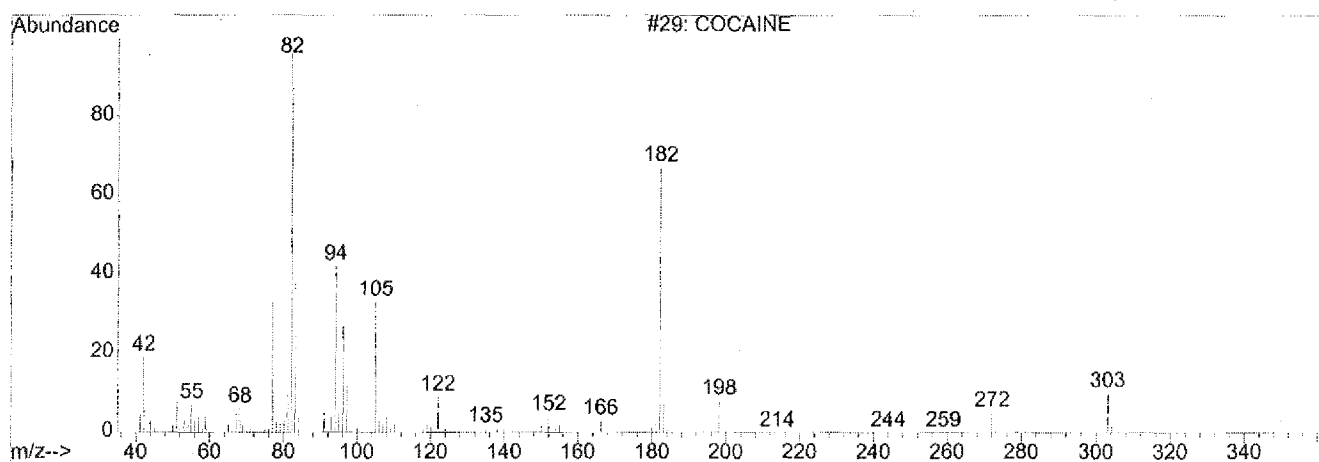
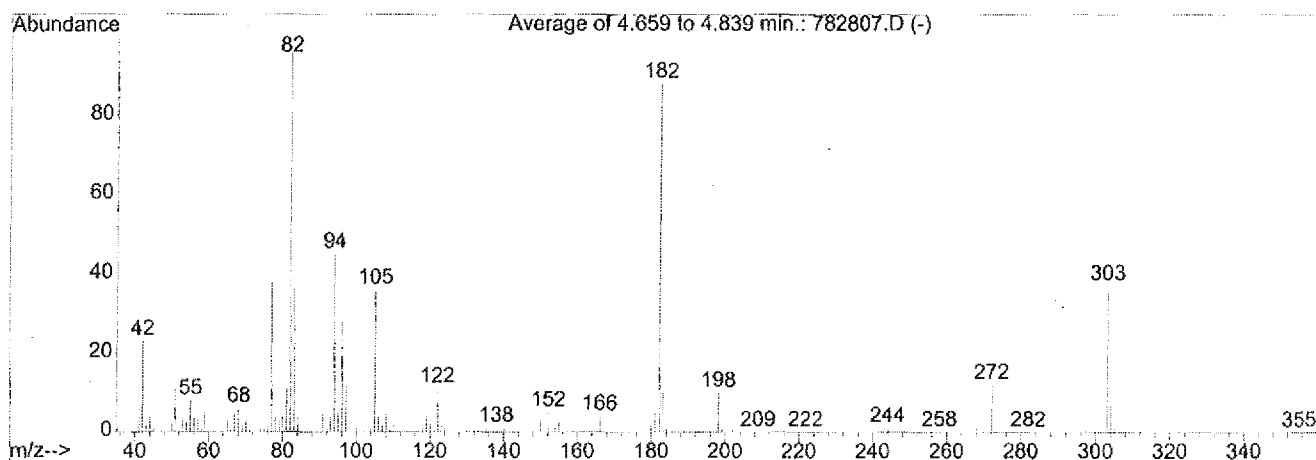
Area Percent / Library Search Report

Information from Data File:

File Name : F:\SYSTEM7\04_15_11\782807.D
 Operator : ASD
 Date Acquired : 15 Apr 2011 9:50
 Sample Name : XXXXXXXXXX
 Submitted by : ASD
 Vial Number : 7
 AcquisitionMeth: DRUGS
 Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90
 C:\DATABASE\PMW_TOX2.L Minimum Quality: 90
 C:\DATABASE\NIST98.L

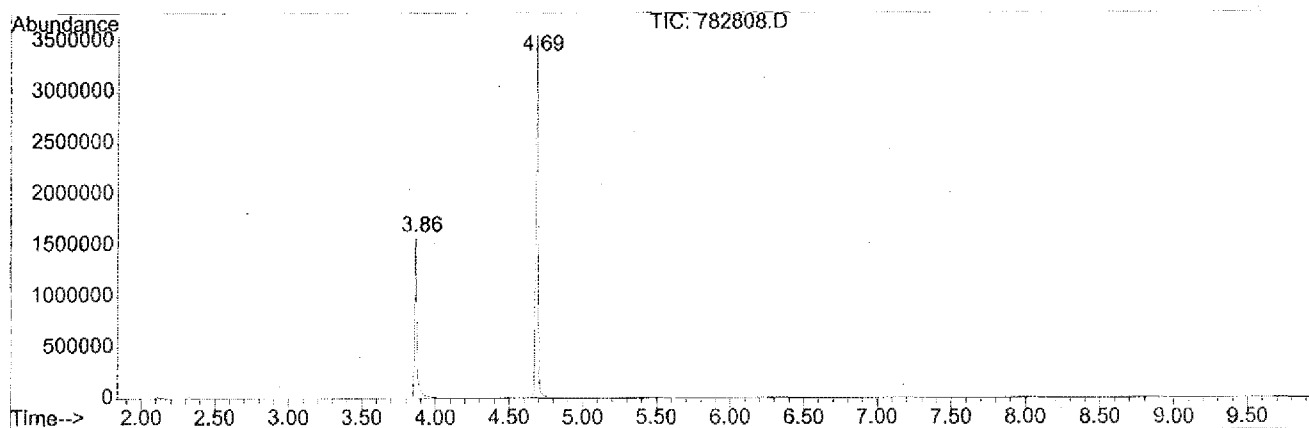
PK#	RT	Library/ID	CAS#	Qual
2	4.69	C:\DATABASE\SLI.L COCAINE	000050-36-2	99



Area Percent / Library Search Report

Information from Data File:

File Name : F:\SYSTEM7\04_15_11\782808.D
 Operator : ASD
 Date Acquired : 15 Apr 2011 10:02
 Sample Name : XXXXXXXXXX
 Submitted by : ASD
 Vial Number : 8
 AcquisitionMeth: DRUGS
 Integrator : RTE



Ret. Time	Area	Area %	Ratio %
3.865	1892101	31.74	46.50
4.686	4069196	68.26	100.00

Area Percent / Library Search Report

Information from Data File:

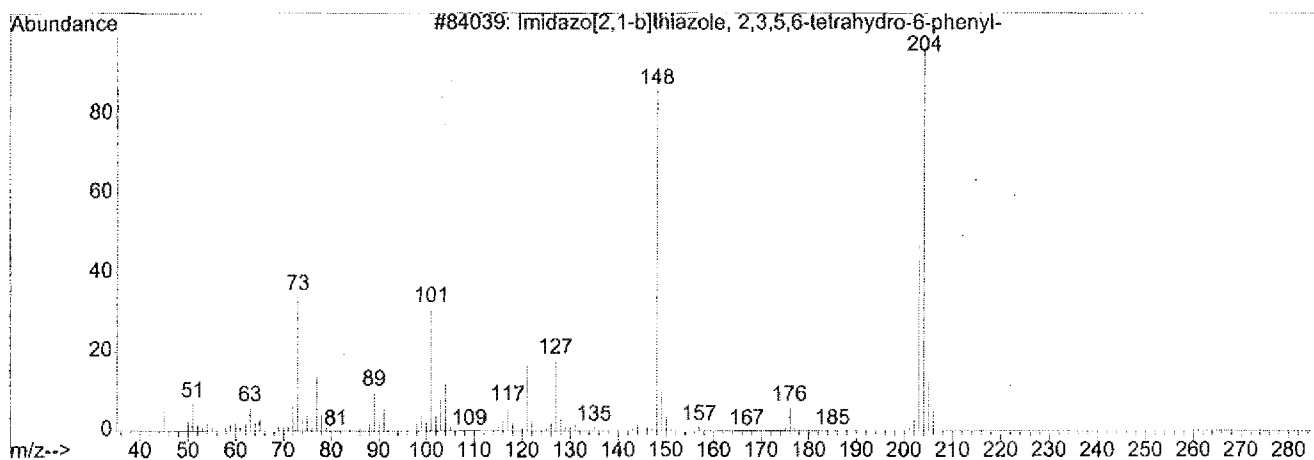
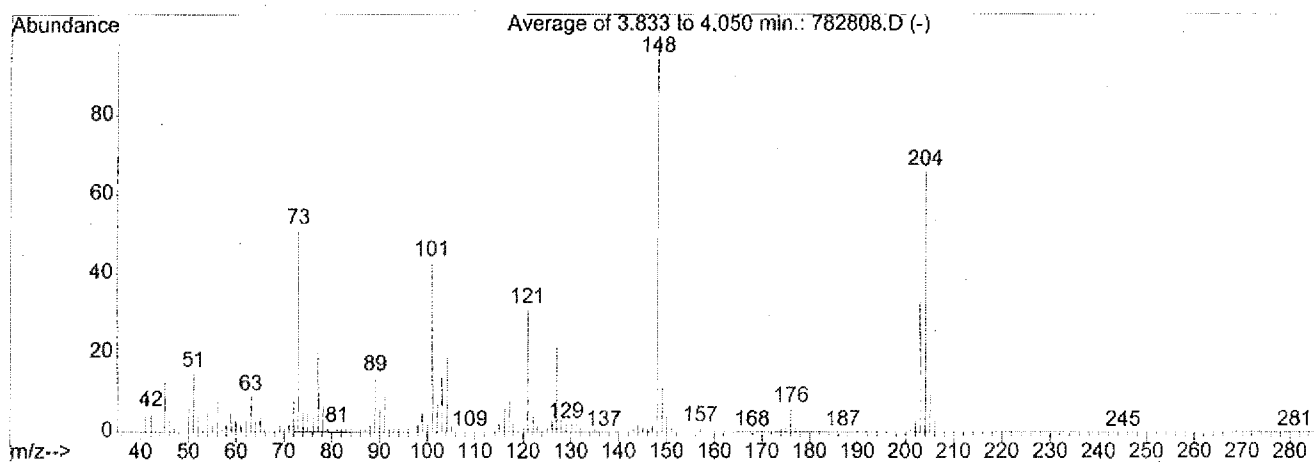
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File Name       : F:\SYSTEM7\04_15_11\782808.D
Operator        : ASD
Date Acquired   : 15 Apr 2011  10:02
Sample Name     : ██████████
Submitted by    : ASD
Vial Number     : 8
AcquisitionMeth : DRUGS
Integrator      : RTE
  
```

```

Search Libraries: C:\DATABASE\SLI.L           Minimum Quality: 90
                  C:\DATABASE\PMW_TOX2.L      Minimum Quality: 90
                  C:\DATABASE\NIST98.L
  
```

PK#	RT	Library/ID	CAS#	Qual
1	3.86	C:\DATABASE\NIST98.L		
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	98
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	98
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	97



Area Percent / Library Search Report

Information from Data File:

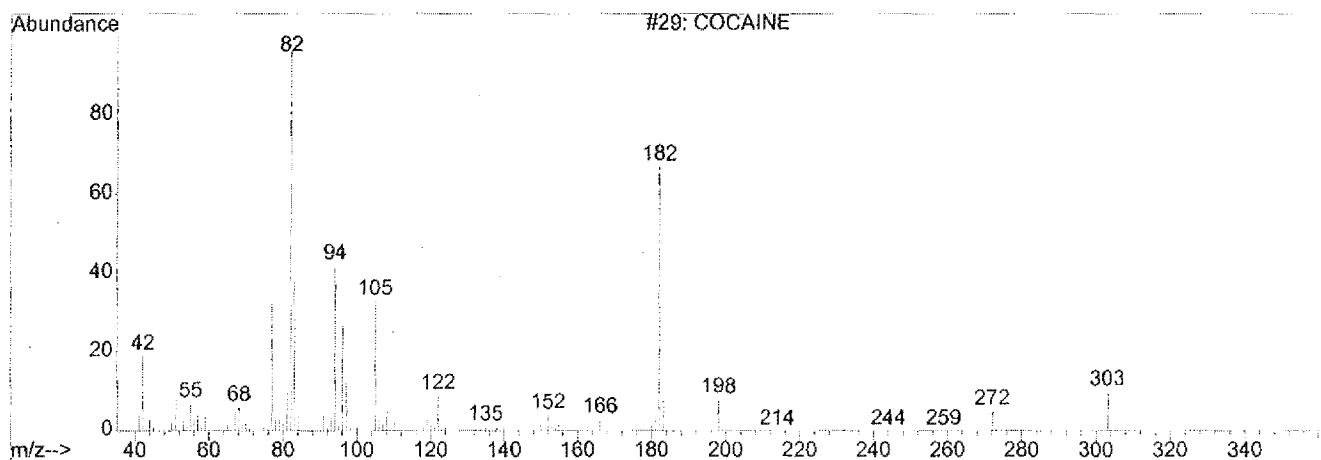
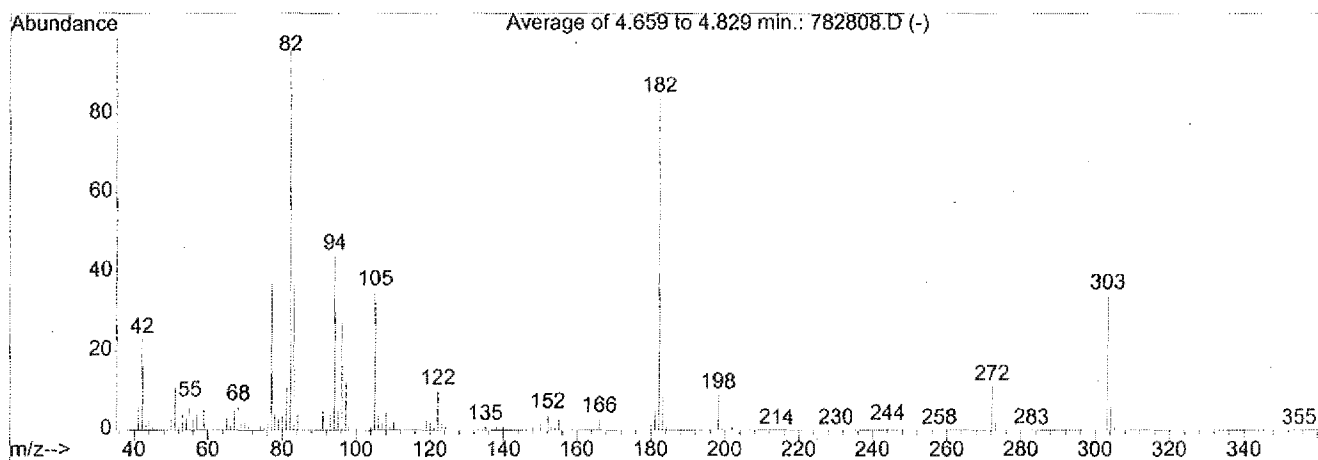
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File Name       : F:\SYSTEM7\04_15_11\782808.D
Operator        : ASD
Date Acquired   : 15 Apr 2011  10:02
Sample Name     : ██████████
Submitted by    : ASD
Vial Number     : 8
AcquisitionMeth : DRUGS
Integrator      : RTE
  
```

```

Search Libraries: C:\DATABASE\SLI.L           Minimum Quality: 90
                  C:\DATABASE\PMW_TOX2.L      Minimum Quality: 90
                  C:\DATABASE\NIST98.L
  
```

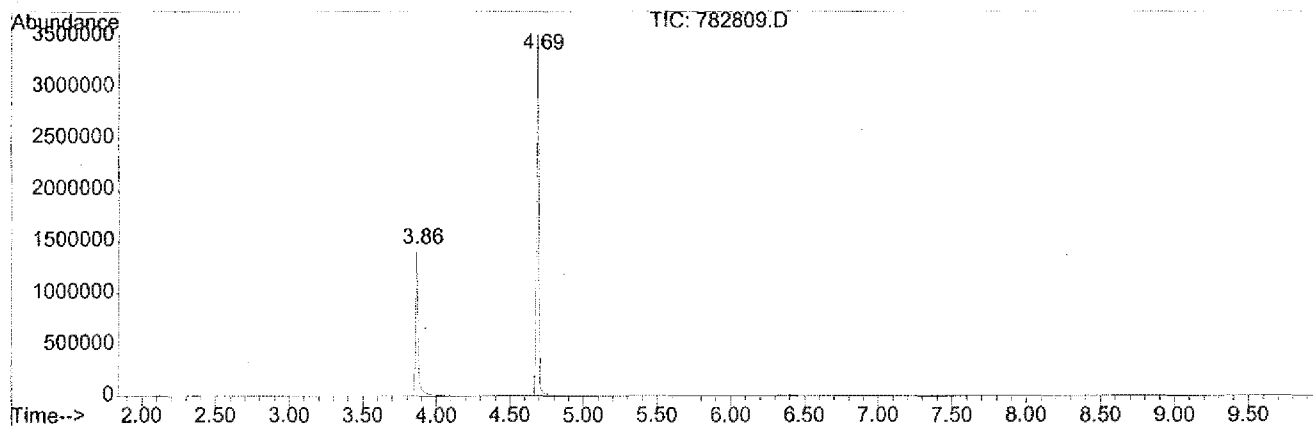
PK#	RT	Library/ID	CAS#	Qual
2	4.69	C:\DATABASE\SLI.L COCAINE	000050-36-2	99



Area Percent / Library Search Report

Information from Data File:

File Name : F:\SYSTEM7\04_15_11\782809.D
 Operator : ASD
 Date Acquired : 15 Apr 2011 10:15
 Sample Name : XXXXXXXXXX
 Submitted by : ASD
 Vial Number : 9
 AcquisitionMeth: DRUGS
 Integrator : RTE



Ret. Time	Area	Area %	Ratio %
3.865	1723459	31.61	46.22
4.686	3729213	68.39	100.00

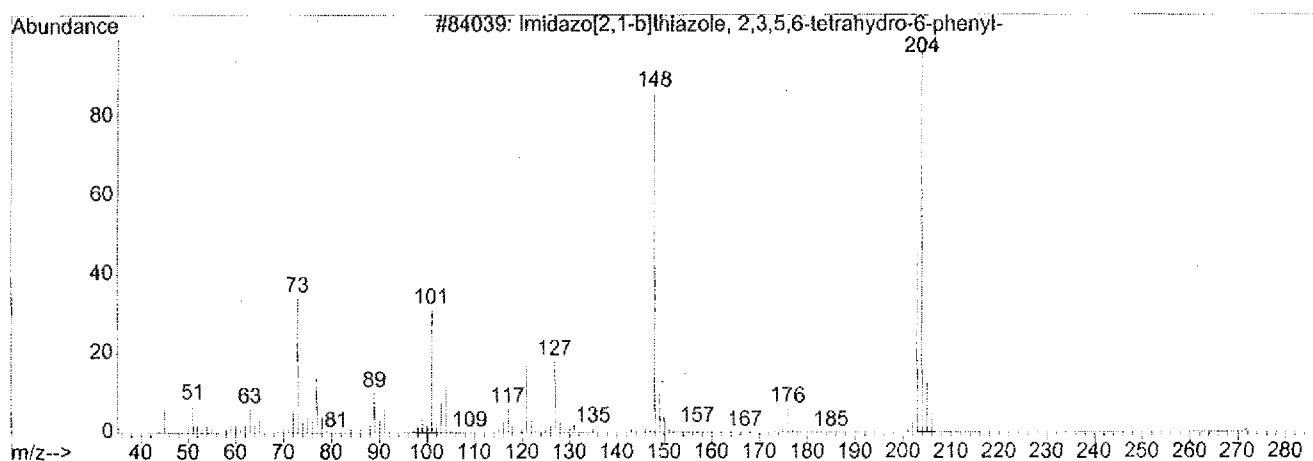
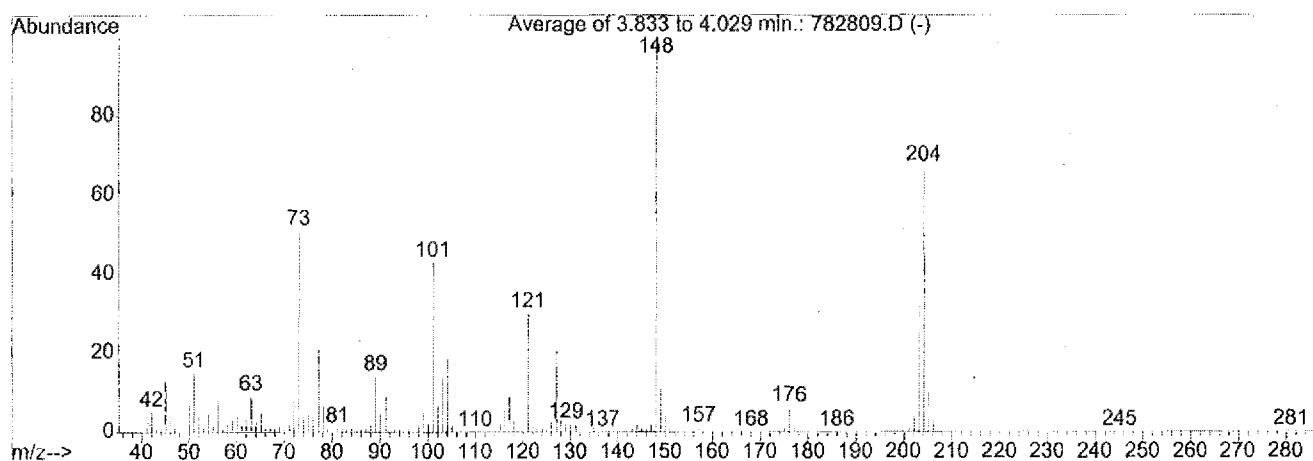
Area Percent / Library Search Report

Information from Data File:

File Name : F:\SYSTEM7\04_15_11\782809.D
 Operator : ASD
 Date Acquired : 15 Apr 2011 10:15
 Sample Name : XXXXXXXXXX
 Submitted by : ASD
 Vial Number : 9
 AcquisitionMeth: DRUGS
 Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90
 C:\DATABASE\PMW_TOX2.L Minimum Quality: 90
 C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
1	3.86	C:\DATABASE\NIST98.L		
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	99
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	98
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	97



Area Percent / Library Search Report

Information from Data File:

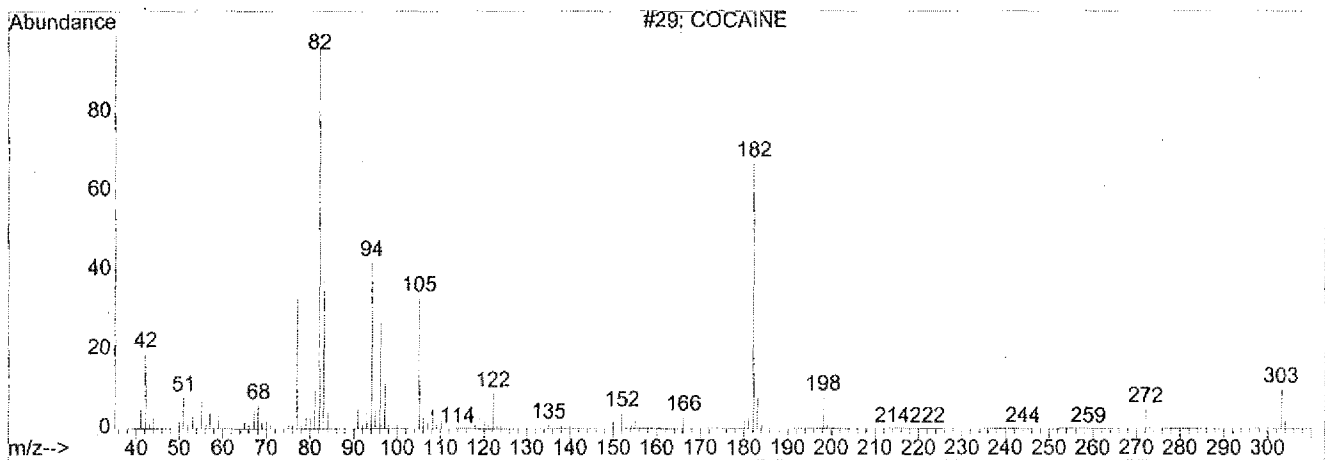
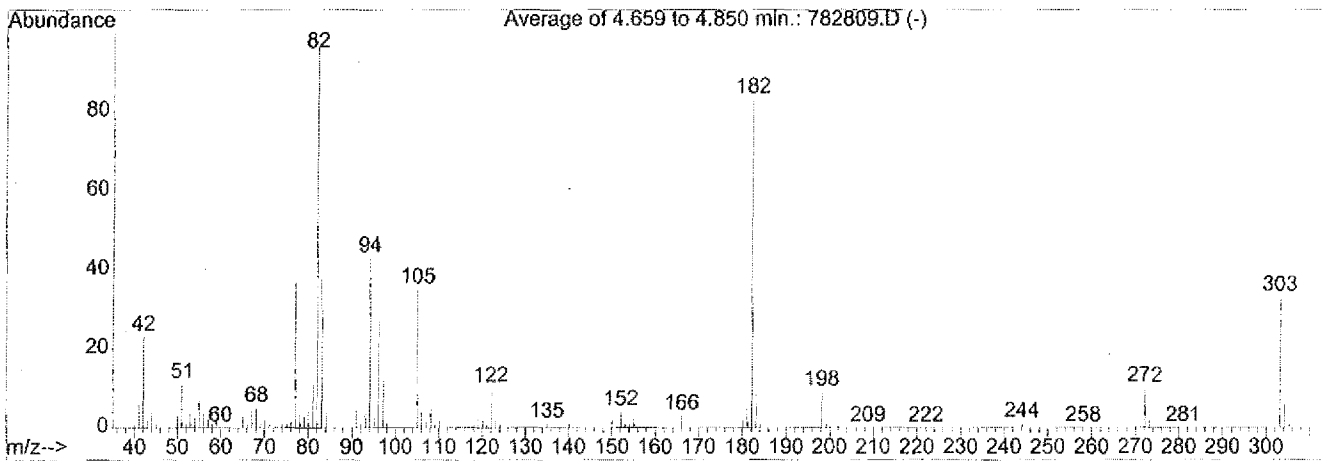
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File Name       : F:\SYSTEM7\04_15_11\782809.D
Operator        : ASD
Date Acquired   : 15 Apr 2011  10:15
Sample Name     : ██████████
Submitted by    : ASD
Vial Number     : 9
AcquisitionMeth : DRUGS
Integrator      : RTE
  
```

```

Search Libraries: C:\DATABASE\SLI.L           Minimum Quality: 90
                  C:\DATABASE\PMW_TOX2.L      Minimum Quality: 90
                  C:\DATABASE\NIST98.L
  
```

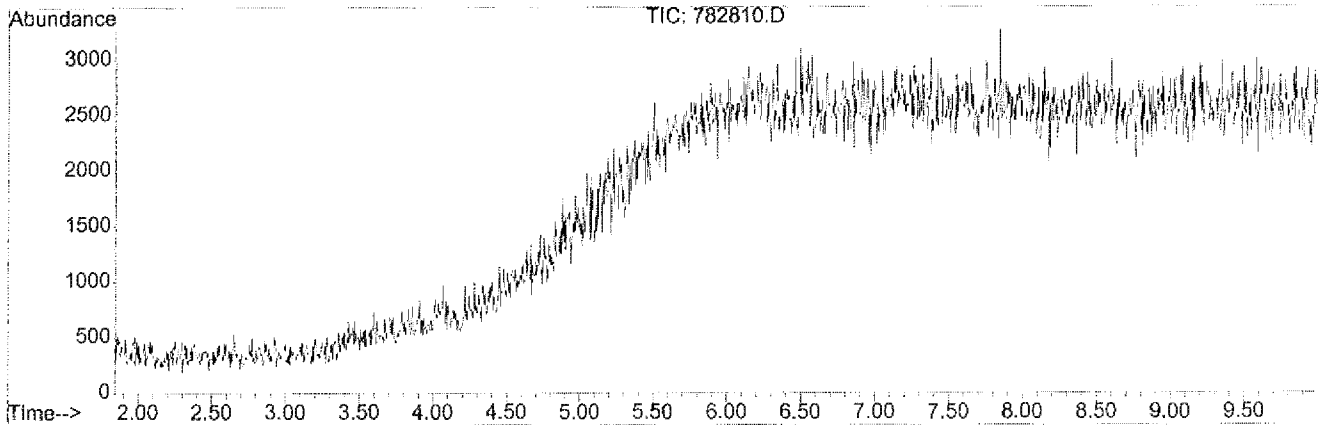
PK#	RT	Library/ID	CAS#	Qual
2	4.69	C:\DATABASE\SLI.L COCAINE	000050-36-2	99



Area Percent / Library Search Report

Information from Data File:

File Name : F:\SYSTEM7\04_15_11\782810.D
Operator : ASD
Date Acquired : 15 Apr 2011 10:28
Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS
Integrator : RTE



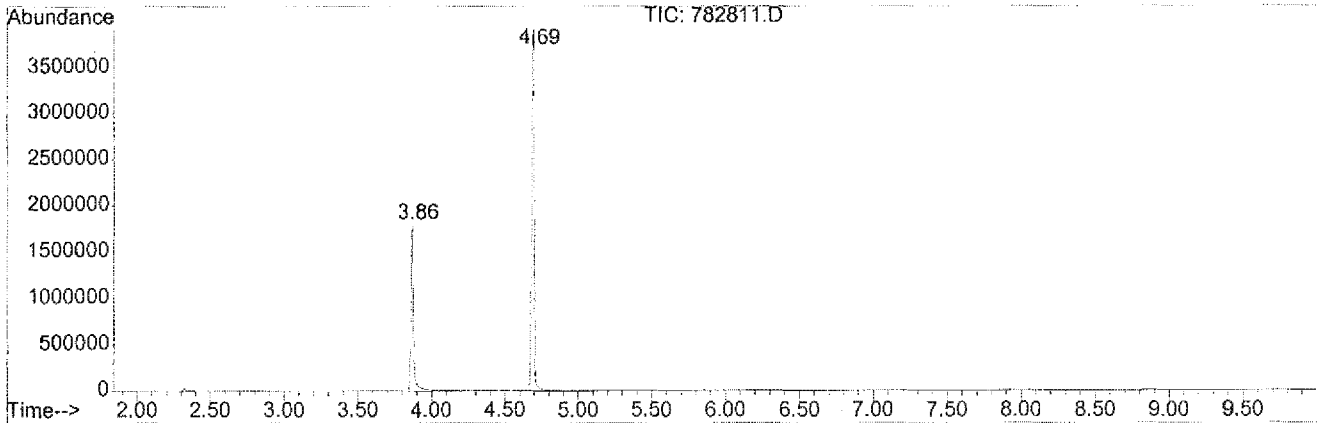
Ret. Time	Area	Area %	Ratio %
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NO INTEGRATED PEAKS

Area Percent / Library Search Report

Information from Data File:

File Name : F:\SYSTEM7\04_15_11\782811.D
Operator : ASD
Date Acquired : 15 Apr 2011 10:40
Sample Name : XXXXXXXXXX
Submitted by : ASD
Vial Number : 11
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
3.865	2109909	31.57	46.12
4.691	4574419	68.43	100.00

Area Percent / Library Search Report

Information from Data File:

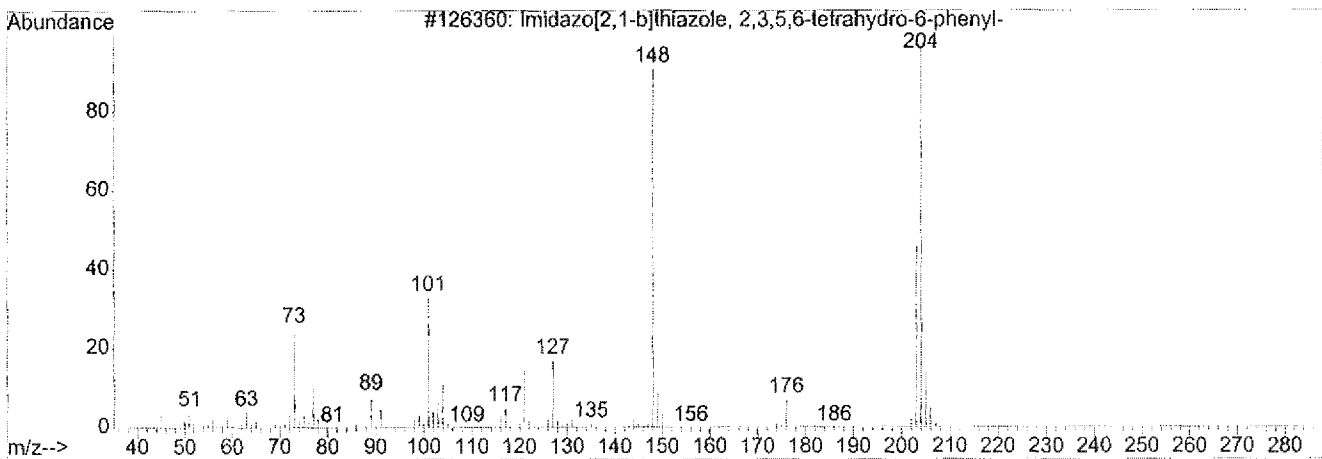
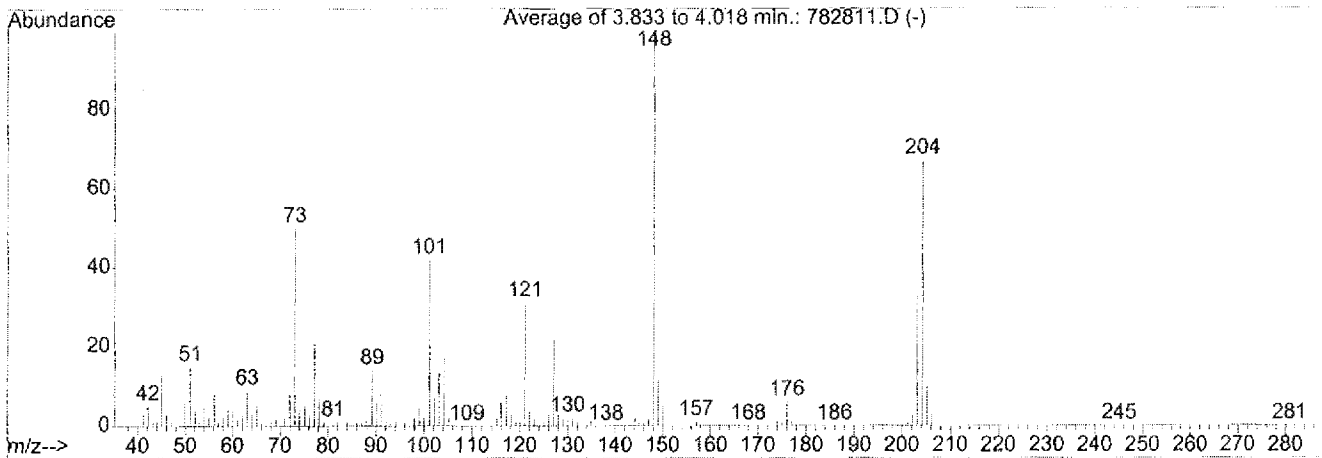
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File Name       : F:\SYSTEM7\04_15_11\782811.D
Operator        : ASD
Date Acquired   : 15 Apr 2011  10:40
Sample Name     : ██████████
Submitted by    : ASD
Vial Number     : 11
AcquisitionMeth : DRUGS
Integrator      : RTE
  
```

```

Search Libraries: C:\DATABASE\SLI.L           Minimum Quality: 90
                  C:\DATABASE\PMW_TOX2.L      Minimum Quality: 90
                  C:\DATABASE\NIST98.L
  
```

PK#	RT	Library/ID	CAS#	Qual
1	3.86	C:\DATABASE\NIST98.L		
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	98
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	98
		Levamisole Hydrochloride	016595-80-5	98



Area Percent / Library Search Report

Information from Data File:

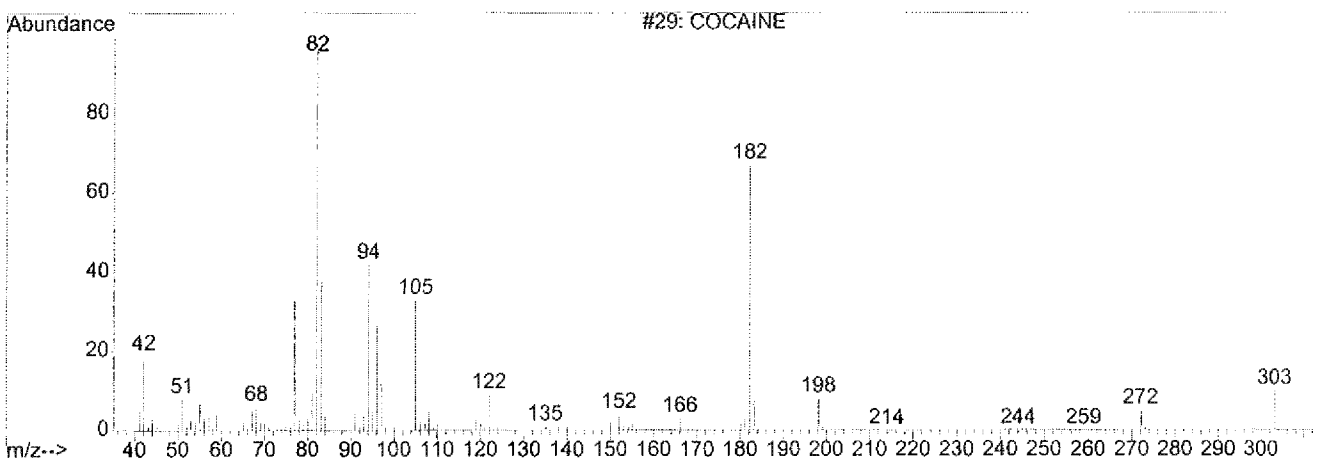
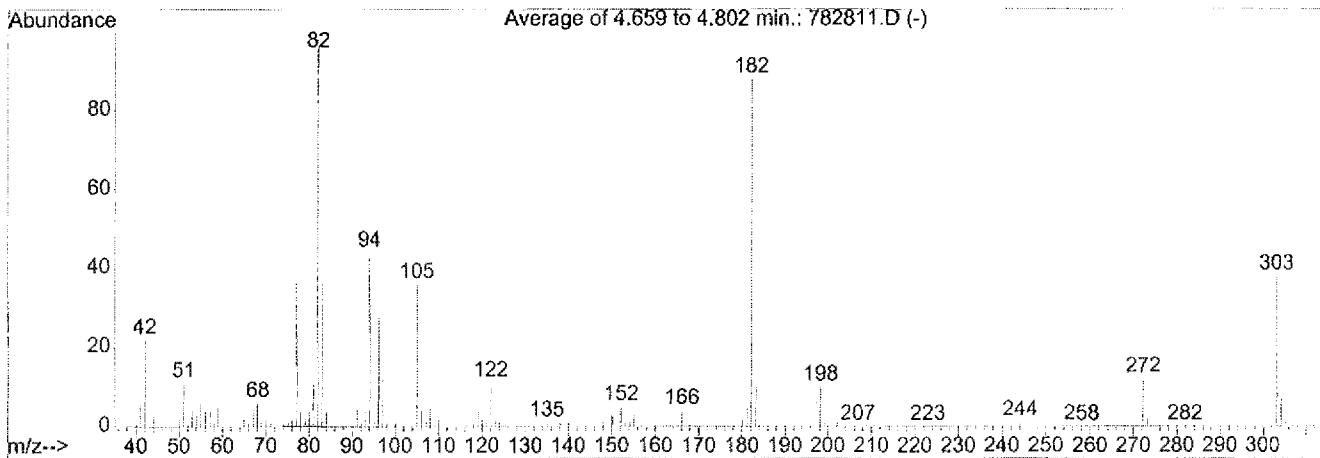
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File Name       : F:\SYSTEM7\04_15_11\782811.D
Operator        : ASD
Date Acquired   : 15 Apr 2011  10:40
Sample Name     : ██████████
Submitted by    : ASD
Vial Number     : 11
AcquisitionMeth : DRUGS
Integrator      : RTE
  
```

```

Search Libraries: C:\DATABASE\SLI.L           Minimum Quality: 90
                  C:\DATABASE\PMW_TOX2.L      Minimum Quality: 90
                  C:\DATABASE\NIST98.L
  
```

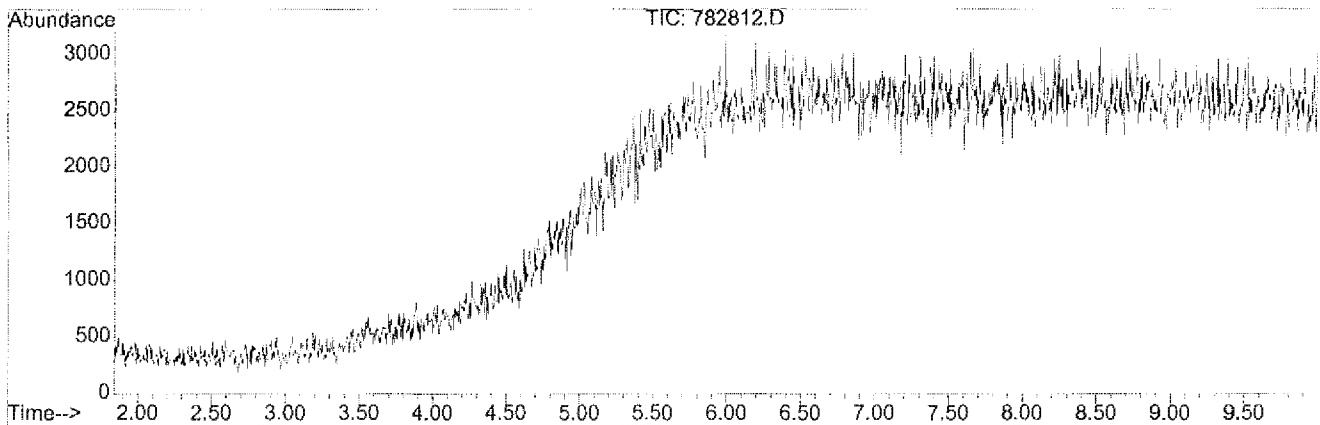
PK#	RT	Library/ID	CAS#	Qual
2	4.69	C:\DATABASE\SLI.L COCAINE	000050-36-2	99



Area Percent / Library Search Report

Information from Data File:

File Name : F:\SYSTEM7\04_15_11\782812.D
Operator : ASD
Date Acquired : 15 Apr 2011 10:53
Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS
Integrator : RTE



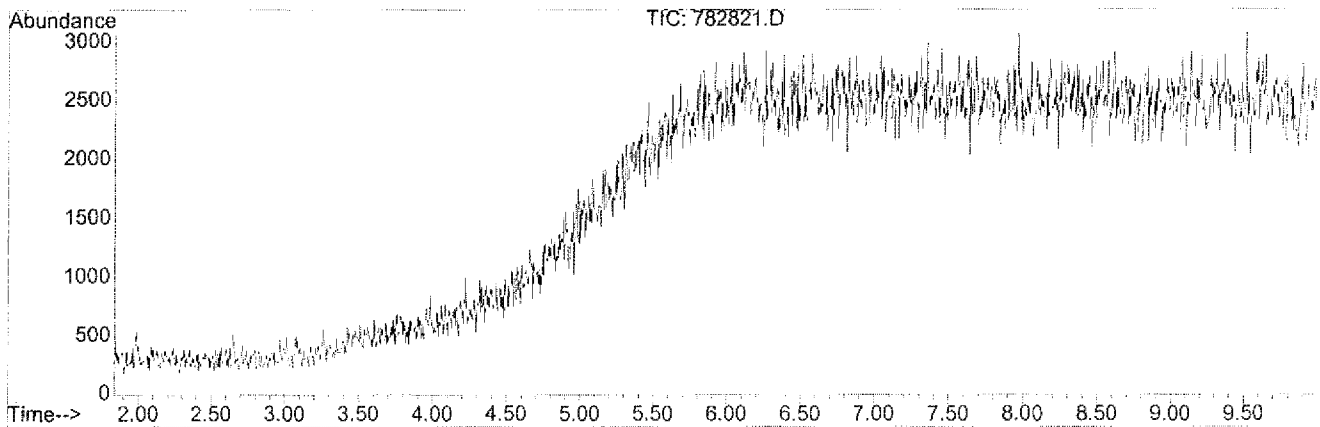
Ret. Time	Area	Area %	Ratio %
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NO INTEGRATED PEAKS

Area Percent / Library Search Report

Information from Data File:

File Name : F:\SYSTEM7\04_15_11\782821.D
Operator : ASD
Date Acquired : 15 Apr 2011 12:46
Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS
Integrator : RTE



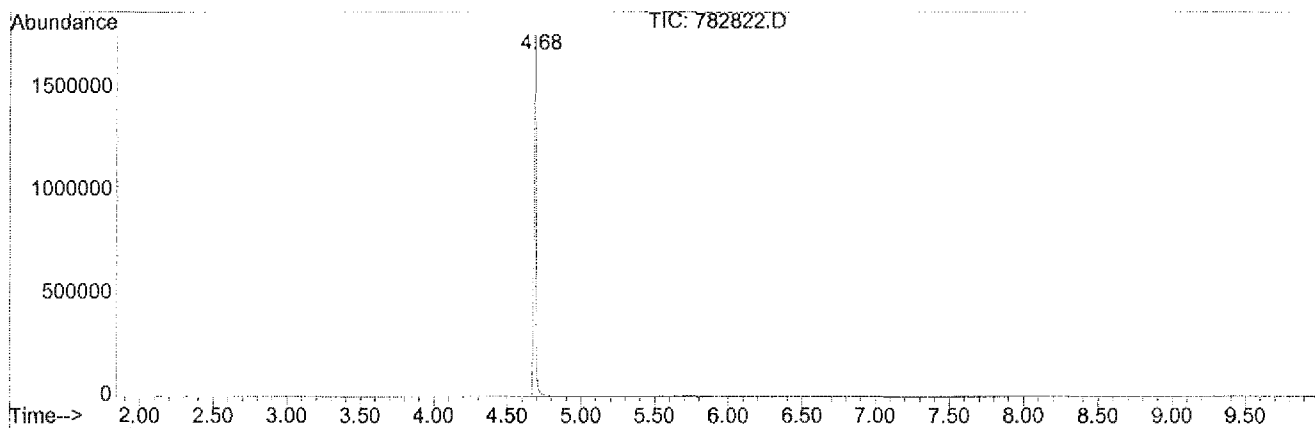
Ret. Time	Area	Area %	Ratio %
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NO INTEGRATED PEAKS

Area Percent / Library Search Report

Information from Data File:

File Name : F:\SYSTEM7\04_15_11\782822.D
 Operator : ASD
 Date Acquired : 15 Apr 2011 12:59
 Sample Name : COCAINE STD
 Submitted by : ASD
 Vial Number : 5
 AcquisitionMeth: DRUGS
 Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.680	1765547	100.00	100.00

Area Percent / Library Search Report

Information from Data File:

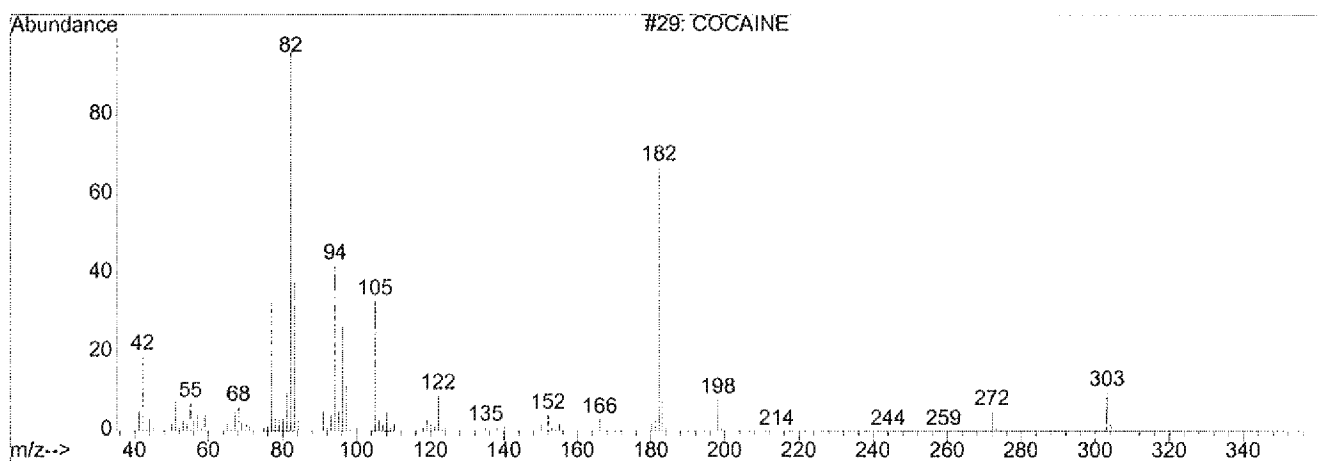
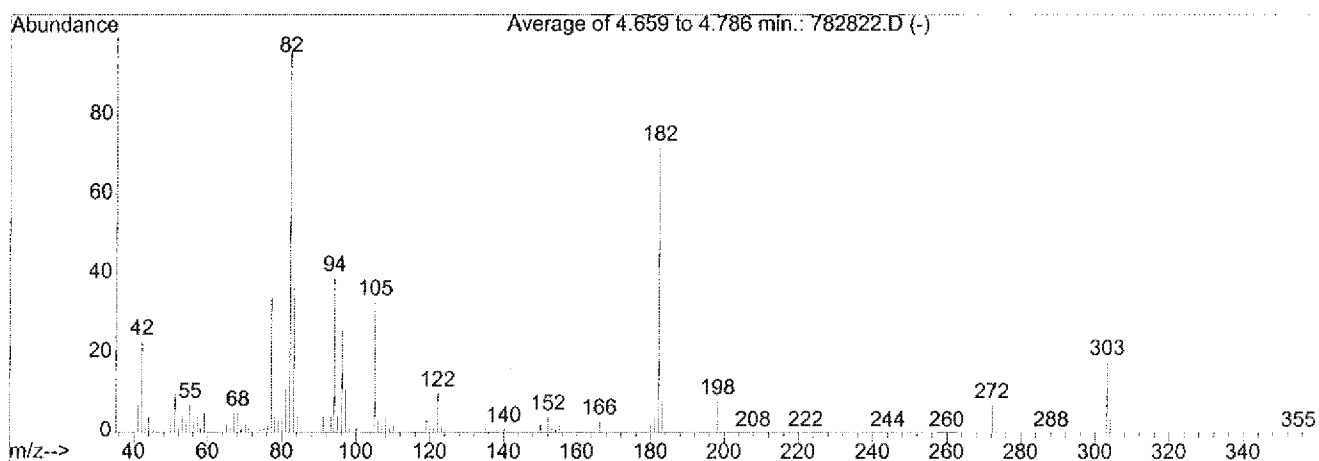
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File Name       : F:\SYSTEM7\04_15_11\782822.D
Operator        : ASD
Date Acquired   : 15 Apr 2011  12:59
Sample Name     : COCAINE STD
Submitted by    : ASD
Vial Number     : 5
AcquisitionMeth : DRUGS
Integrator      : RTE
  
```

```

Search Libraries: C:\DATABASE\SLI.L           Minimum Quality: 90
                  C:\DATABASE\PMW_TOX2.L      Minimum Quality: 90
                  C:\DATABASE\NIST98.L
  
```

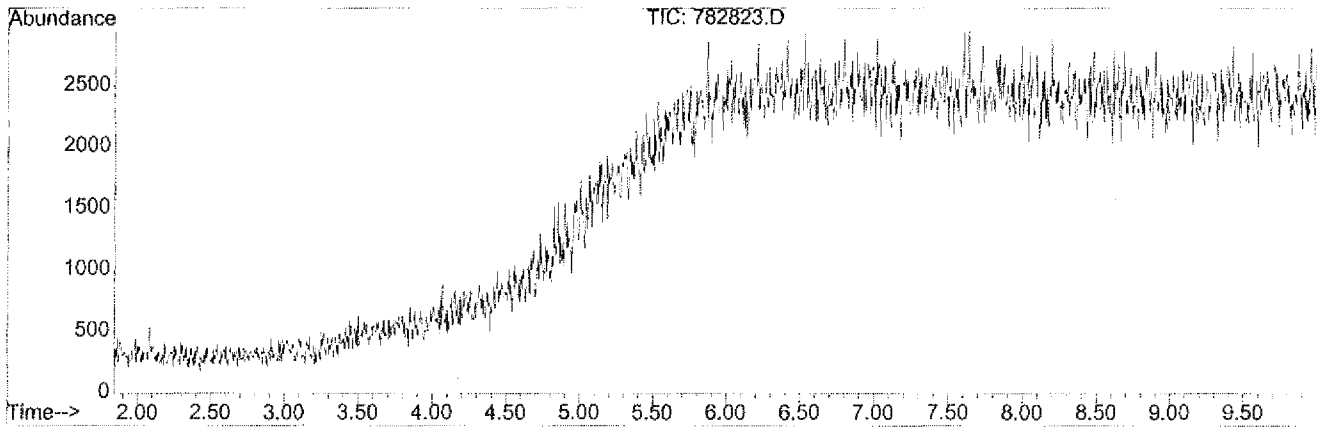
PK#	RT	Library/ID	CAS#	Qual
1	4.68	C:\DATABASE\SLI.L COCAINE	000050-36-2	99



Area Percent / Library Search Report

Information from Data File:

File Name : F:\SYSTEM7\04_15_11\782823.D
Operator : ASD
Date Acquired : 15 Apr 2011 13:11
Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
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NO INTEGRATED PEAKS